

NASA Facilities



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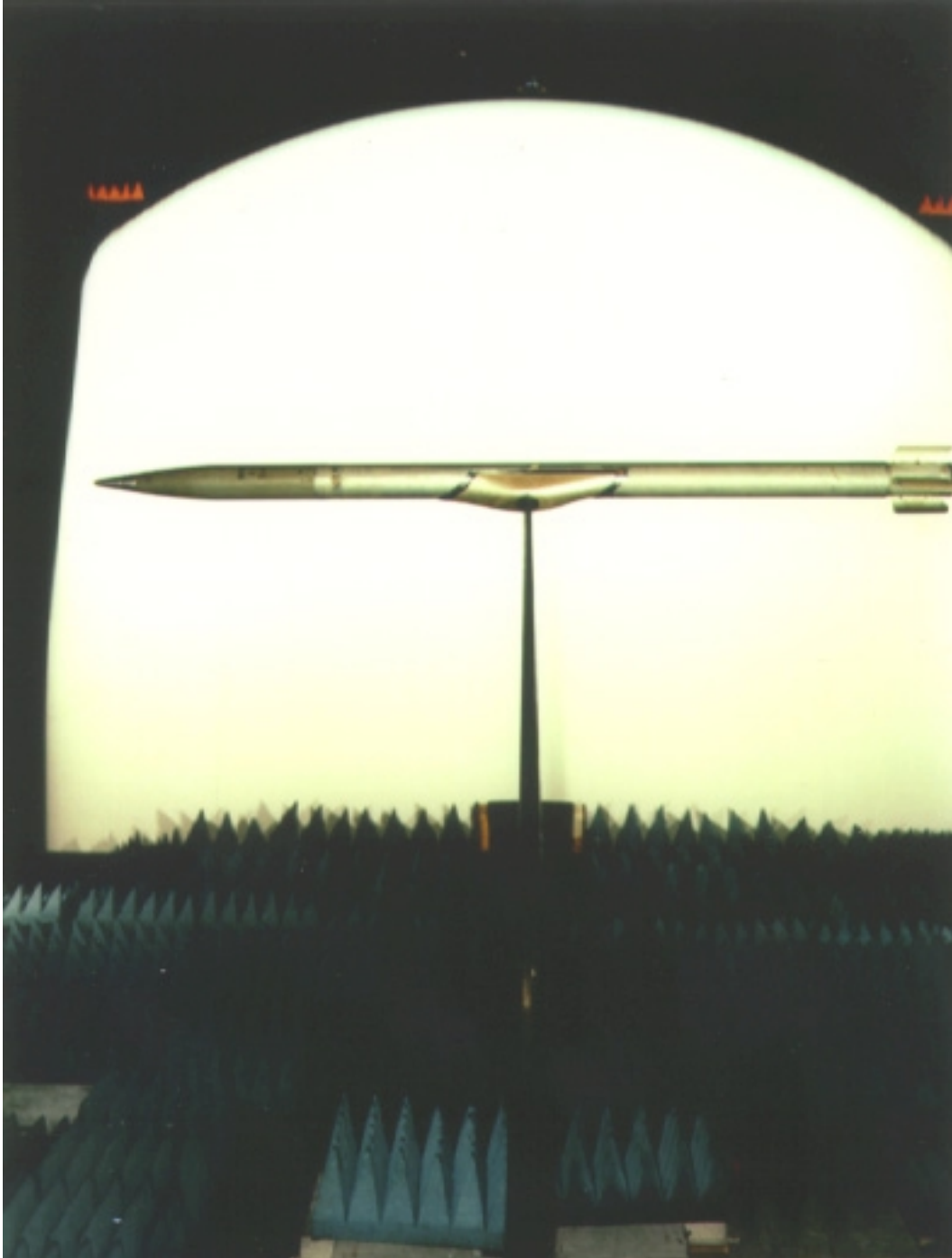
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Compact Range Pilot Facility

NASA Langley Research Center
Hampton, VA

TYPE OF FACILITY: Indoor, static, research and development
POINT OF CONTACT: Melvin C. Gilreath
MS490
8 North Dryden Street
NASA Langley Research Center
Hampton, VA
Phone: (757) 864-1817
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E-mail: m.c.gilreath@larc.nasa.gov
PERTINENT TESTING: RCS and antenna performance measurements
FACILITY DESCRIPTION: Facility is focus fed compact range
RANGE LENGTH: 65 feet
FREQUENCY COVERAGE: 0.50-18 GHz
POLARIZATION COVERAGE: HH, VV
DYNAMIC RANGE: 0.5-2.0 GHz = 70 dB; 2.0-18.0 GHz = 90 dB
RANGE RESOLUTION: 0.5-2.0 GHz = 10 cm (parameter dependent);
2.0-18.0 GHz = 1 cm (parameter dependent)
TARGET SUPPORTS: Metal pylon, foam columns
TARGET LIMITATIONS: Up to 8 x 8 x 8 feet; <2,000 pounds
DATA PROCESSING: Full processing capability to include RCS-vs-frequency, RCS-vs-azimuth, imaging and antenna performance data.

Test Model During RCS Testing in Compact Range Pilot Facility



Experimental Test Range

NASA Langley Research Center

Hampton, VA

TYPE OF FACILITY: Indoor, static, research & development, technology development

POINT OF CONTACT: Melvin C. Gilreath
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PERTINENT TESTING: RCS measurements

FACILITY DESCRIPTION: Facility is focus (side) fed compact range

RANGE LENGTH: 80 feet

FREQUENCY COVERAGE: 0.3-18 GHz

POLARIZATION COVERAGE: HH, VV

DYNAMIC RANGE: TBD

RANGE RESOLUTION: TBD

TARGET SUPPORTS: String system, foam columns

TARGET LIMITATIONS: Up to 13 x 13 x 13 feet (expected); <2,000 pounds

DATA PROCESSING: Full processing capability to include RCS-vs-frequency, RCS-vs-azimuth, and imaging.

Experimental Test Range (Under Development)

